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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,446	02/19/2002	Makito Mukae	Q68588	9879

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EXAMINER

KNABLE, GEOFFREY L

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/076,446

Applicant(s)

MUKAE, MAKITO

Examiner

Geoffrey L. Knable

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8-6-02. 6) ☐ Other:

1. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 2+, the phrase beginning with "when..." is confusing as it is not clear how these steps fit into the overall method and particularly the steps referred to later in the claim, this rendering the scope of the claim indefinite and confusing. It is suggested that the claim be recast to more positively define the claimed method steps to avoid this ambiguity. Further, in line 4, the reference to "to shape a green tire" is not understood. This would seem to define that the turn-up step is what is being referred to here as "shaping" a green tire - is this what is intended or is this intended to refer to additional carcass shaping operations as described in the specification - clarification is required. Further, the use of different terms to refer to seemingly the same or very similar steps adds additional confusion - note particularly the reference to "wound", "turnup" and "wrap" to apparently refer to the same or at least very similar steps or portions. Clarification is required of the difference among these terms and/or common terminology should be adopted to avoid potential confusion.

Claim 1, lines 4-6 are indefinite and confusing for several reasons. First, it is not clear what the reference to "previously folded" is in reference to - i.e. previous to what? Also, it is not clear how this folding step relates to the apparent subsequent step of shaping into a cylinder, and particularly whether the "previous" is in reference to this step.

Claim 1, lines 6-8 are indefinite and confusing. In particular, reference is made to "both resulting hook-shaped wrap portions" but there is no clear indication as to what step "results" in these portions. Although it seems clear that the intent is that the "previously folded" end portions do in fact form these hook-shaped wrap portions, this should be made clearer in the claim language to avoid this ambiguity. Further, consistency of terminology should be adopted to avoid ambiguity - note for example that claim 1, line 2 refers to an end portion that is "wound" while line 7 refers to "wrap" for apparently the same portion. Also, in these lines, the reference to "at a fall-down posture..." seems arguably confusing. It might be more precise to redefine this as for example --with the stiffener in a fall-down posture--.

Similarly, in lines 8+ of claim 1, it seems that "of the fall-down posture" should be for example --in the fall-down posture--.

Claim 5 is indefinite as it refers to the stiffener being fallen down "after the bead core is locked" - however, there is no previously defined step of "locking" the bead core. As such, it is not clear whether locking the bead core is a positive step of the claimed method and further, without previously defining the locking, it is not clear how the claim 5 steps fit into the claimed method. Clarification is required. Claims 8 and 9 present an analogous ambiguity in referring to "locking". Further, claims 8 and 9 present a similar ambiguity in their reference to the "shaping" of the carcass, their being no clear prior reference to such a shaping step (other than the ambiguous reference to "shape" in line 4 of claim 1).

In claim 7, no antecedent has been established for "the falling deformation".

Further, the rest of the claim is grammatically awkward and thereby confusing.

It is not clear how claim 12 further limits what is already defined in claim 2. If it does or is intended to further limit, then clarification is required as to how it does.

2. Claims 1-15 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Among the closest prior art, Tsukagoshi et al. (US 6,530,411) discloses a method of building a tire in which the carcass turn-up end is positioned between the bead core and the stiffener/filler and which further include the formation of hook shaped wrap portions in the ends of the carcass ply within which the bead cores are positioned - note esp. figs. 20-29. This patent however does not teach or render obvious additionally setting of the bead cores *with an attached stiffener in a fall-down posture* in these wrap portions followed by standing the stiffeners up on an outer peripheral side of the wrap portion as claimed.

WO 99/48708 (cited by applicant) is another example of a known tire having the bead turn-up positioned between the bead core and the stiffener/filler but does not otherwise suggest a method as claimed.

Winstanley et al. (US 3,654,007) and Stalter et al. (US 4,683,021 - note esp. fig. 3) are exemplary of the known application of a bead/filler on a cylindrical tire carcass with the filler in a "fall-down posture". These references however do not teach or render obvious preforming hook-shaped wrap portions on the carcass or setting the beads with

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attached stiffener/filler, which stiffener/filler will be stood up on an outer peripheral side of these wrap portions as claimed.


Kawaguchi et al. (US 5,294,275) discloses attaching a bead filler to a bead core in which the filler is raised from a "fall down" posture to a stood up posture but this is only described in the context of forming a bead/filler assembly and thus would not teach or render obvious a method in which the stood up bead filler is stood up on an outer peripheral surface of carcass wrap portions as claimed.

None of the closest prior art, then, whether taken singly or in combination, would teach or render obvious a method as claimed.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 703-308-2062 until 12/18/2003; 571-272-1220 thereafter. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 703-308-3853. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.


Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
November 26, 2003